ABSTRACT OF THE DISCLOSURE

A fire protection sprinkler system for metal buildings has horizontally oriented sprinkler heads mounted on water supply lines extending along each side of rafters supporting the roof of a metal building so as to provide protection for bays between adjacent rafters having a width up to 25 feet or more. The sprinkler heads have a vertical part facing an outlet in a sprinkler body and a hood-shaped part supported from the vertical part and having downwardly inclined side walls and a downwardly inclined front wall. The deflector arrangement is supported from the sprinkler body by a pair of frame arms which converge at a boss on which the vertical part is mounted and another deflector part having rearwardly inclined arms extending horizontally, downwardly at an angle and substantially vertically, is supported between the boss and the vertical part of the deflector.